



Health	3
Fire	0
Reactivity	0
Personal Protection	

## Material Safety Data Sheet

### Aceto Orcein, 2% MSDS

#### Section 1: Chemical Product and Company Identification

**Product Name:** Aceto Orcein, 2%

**Catalog Codes:** SLA4771

**CAS#:** Mixture.

**RTECS:** Not applicable.

**TSCA:** TSCA 8(b) inventory: Orcein; Acetic acid; Water

**CI#:** Not available.

**Synonym:**

**Chemical Name:** Not applicable.

**Chemical Formula:** Not applicable.

**Contact Information:**

**Sciencelab.com, Inc.**  
14025 Smith Rd.  
Houston, Texas 77396

US Sales: **1-800-901-7247**  
International Sales: **1-281-441-4400**

Order Online: [ScienceLab.com](http://ScienceLab.com)

**CHEMTREC (24HR Emergency Telephone), call:**  
1-800-424-9300

**International CHEMTREC, call:** 1-703-527-3887

**For non-emergency assistance, call:** 1-281-441-4400

#### Section 2: Composition and Information on Ingredients

**Composition:**

Name	CAS #	% by Weight
Orcein	1400-62-0	2
Acetic acid	64-19-7	60
Water	7732-18-5	38

**Toxicological Data on Ingredients:** Orcein LD50: Not available. LC50: Not available. Acetic acid: ORAL (LD50): Acute: 3310 mg/kg [Rat]. 4960 mg/kg [Mouse]. 3530 mg/kg [Rat]. DERMAL (LD50): Acute: 1060 mg/kg [Rat].

#### Section 3: Hazards Identification

**Potential Acute Health Effects:**

Very hazardous in case of ingestion, . Hazardous in case of skin contact (corrosive, permeator). Slightly hazardous in case of eye contact (irritant), of inhalation (lung sensitizer). Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath.

**Potential Chronic Health Effects:**

Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.  
Non-sensitizer for skin.  
CARCINOGENIC EFFECTS: Not available.

**MUTAGENIC EFFECTS:** Not available.

**TERATOGENIC EFFECTS:** Not available.

**DEVELOPMENTAL TOXICITY:** Not available.

The substance is toxic to blood, kidneys, lungs, mucous membranes, bladder, gastrointestinal tract, upper respiratory tract.

Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection.

## Section 4: First Aid Measures

### **Eye Contact:**

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

### **Skin Contact:**

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

### **Serious Skin Contact:**

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

### **Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

### **Serious Inhalation:**

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. **WARNING:** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

### **Ingestion:**

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

**Serious Ingestion:** Not available.

## Section 5: Fire and Explosion Data

**Flammability of the Product:** Flammable.

**Auto-Ignition Temperature:** The lowest known value is 427°C (800.6°F) (Acetic acid).

**Flash Points:** The lowest known value is CLOSED CUP: 39°C (102.2°F). OPEN CUP: 43°C (109.4°F). (Acetic acid)

**Flammable Limits:** The greatest known range is LOWER: 4% UPPER: 19.9% (Acetic acid)

**Products of Combustion:** These products are carbon oxides (CO, CO<sub>2</sub>).

### **Fire Hazards in Presence of Various Substances:**

Slightly flammable to flammable in presence of oxidizing materials.

Non-flammable in presence of open flames and sparks, of shocks, of heat, of reducing materials, of combustible materials, of organic materials, of metals, of acids, of alkalis.

**Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

**Fire Fighting Media and Instructions:**

Flammable liquid, soluble or dispersed in water.

SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use alcohol foam, water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.

**Special Remarks on Fire Hazards:** Not available.

**Special Remarks on Explosion Hazards:** Not available.

## Section 6: Accidental Release Measures

**Small Spill:**

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary: Neutralize the residue with a dilute solution of sodium carbonate.

**Large Spill:**

Flammable liquid. Corrosive liquid.

Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Neutralize the residue with a dilute solution of sodium carbonate. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

## Section 7: Handling and Storage

**Precautions:**

Keep container dry. Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as acids, alkalis.

May corrode metallic surfaces. Store in a metallic or coated fiberboard drum using a strong polyethylene inner package.

**Storage:**

Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

## Section 8: Exposure Controls/Personal Protection

**Engineering Controls:**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

**Personal Protection:**

Face shield. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Boots.

**Personal Protection in Case of a Large Spill:**

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:**

Acetic acid

TWA: 10 STEL: 15 (ppm) from ACGIH (TLV) [United States] [1998]

TWA: 10 (ppm) from NIOSH

TWA: 10 (ppm) [Australia]

Consult local authorities for acceptable exposure limits.

**Section 9: Physical and Chemical Properties****Physical state and appearance:** Liquid.**Odor:** Not available.**Taste:** Not available.**Molecular Weight:** Not applicable.**Color:** Not available.**pH (1% soln/water):** Acidic.**Boiling Point:** The lowest known value is 100°C (212°F) (Water). Weighted average: 111.08°C (231.9°F)**Melting Point:** May start to solidify at 16.6°C (61.9°F) based on data for: Acetic acid.**Critical Temperature:** Not available.**Specific Gravity:** Weighted average: 1.03 (Water = 1)**Vapor Pressure:** The highest known value is 2.3 kPa (@ 20°C) (Water). Weighted average: 1.81 kPa (@ 20°C)**Vapor Density:** The highest known value is 2.07 (Air = 1) (Acetic acid). Weighted average: 1.51 (Air = 1)**Volatility:** Not available.**Odor Threshold:** The highest known value is 1.018 ppm (Acetic acid)**Water/Oil Dist. Coeff.:** The product is more soluble in water.**Ionicity (in Water):** Not available.**Dispersion Properties:**

Partially dispersed in methanol, diethyl ether, n-octanol.

See solubility in water, methanol, diethyl ether, n-octanol, acetone.

**Solubility:**

Easily soluble in cold water, hot water.

Partially soluble in methanol, diethyl ether, n-octanol, acetone.

**Section 10: Stability and Reactivity Data****Stability:** The product is stable.**Instability Temperature:** Not available.**Conditions of Instability:** Not available.**Incompatibility with various substances:** Reactive with acids, alkalis.**Corrosivity:**

Corrosive in presence of steel, of aluminum, of zinc, of copper, of stainless steel(304), of stainless steel(316).  
Non-corrosive in presence of glass.

**Special Remarks on Reactivity:** Not available.

**Special Remarks on Corrosivity:** Not available.

**Polymerization:** Will not occur.

### Section 11: Toxicological Information

**Routes of Entry:** Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

**Toxicity to Animals:**

Acute oral toxicity (LD50): 3310 mg/kg [Rat]. (Acetic acid).

Acute dermal toxicity (LD50): 1060 mg/kg [Rat]. (Acetic acid).

**Chronic Effects on Humans:** Not available.

**Other Toxic Effects on Humans:**

Extremely hazardous in case of skin contact (corrosive), of eye contact (corrosive), of inhalation (lung corrosive).  
Very hazardous in case of ingestion, .

**Special Remarks on Toxicity to Animals:** Not available.

**Special Remarks on Chronic Effects on Humans:** Not available.

**Special Remarks on other Toxic Effects on Humans:** Not available.

### Section 12: Ecological Information

**Ecotoxicity:** Not available.

**BOD5 and COD:** Not available.

**Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The products of degradation are more toxic.

**Special Remarks on the Products of Biodegradation:** Not available.

### Section 13: Disposal Considerations

**Waste Disposal:**

### Section 14: Transport Information

**DOT Classification:** Class 8: Corrosive material

**Identification:** : Corrosive liquid, Acidic, Organic, n.o.s. (Aceto Orcein Solution) (Acetic acid) UNNA: UN2790 PG: II

**Special Provisions for Transport:** Not available.

### Section 15: Other Regulatory Information

**Federal and State Regulations:**

Rhode Island RTK hazardous substances: Acetic acid  
Pennsylvania RTK: Acetic acid  
Florida: Acetic acid  
Minnesota: Acetic acid  
Massachusetts RTK: Acetic acid  
New Jersey: Acetic acid  
TSCA 8(b) inventory: Orcein; Acetic acid; Water  
CERCLA: Hazardous substances.: Acetic acid: 5000 lbs. (2268 kg);

**Other Regulations:** OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

**Other Classifications:****WHMIS (Canada):**

CLASS B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).  
CLASS D-2A: Material causing other toxic effects (VERY TOXIC).  
CLASS E: Corrosive liquid.

**DSCL (EEC):**

R10- Flammable.  
R21- Harmful in contact with skin.  
R35- Causes severe burns.

**HMIS (U.S.A.):**

**Health Hazard:** 3

**Fire Hazard:** 0

**Reactivity:** 0

**Personal Protection:**

**National Fire Protection Association (U.S.A.):**

**Health:** 3

**Flammability:** 2

**Reactivity:** 0

**Specific hazard:**

**Protective Equipment:**

Gloves.  
Full suit.  
Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.  
Face shield.

**Section 16: Other Information**

**References:** Not available.

**Other Special Considerations:** Not available.

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